

LEYPUNSKIY, A. I., KAZACHKOVSKIY, O. D., AFEIKANTOV, I. I., PINHASIK,
M. I., KRAENKOYAPOV, N. V., POYKO, M. S.

Sodium-cooled fast reactors. Atom. energ. 17 no. 5:245-248
N 1967. (MIRA 17 1)

L 20049-65 EPF(c)/EPF(n)-2/EPR/EPA(s)-2/EWT(m)/EPA(bb)-2/EWP(b)/EWP(t)
Pr-4/Pr-4/Pt-10/Pu-4 SSD/AFWL/IJP(c) DH/WW/JD/JG

ACCESSION NR: AP4049534

S/0089/64/017/005/0345/0348

AUTHORS: Leypunskiy, A. I.; Kazachkovskiy, O. D.; Afrikantov, I. I.;
Pinkhasik, M. S.; Krasnoyarov, N. V.; Poydo, M. S.

TITLE: Sodium cooled fast reactors /9

SOURCE: Atomnaya energiya, v. 17, no. 5, 1964, 345-348

TOPIC TAGS: power reactor, liquid metal cooled reactor, fast
reactor/BN-350

ABSTRACT: The first fast-neutron power reactor now being designed in the USSR (BN-350) is described. It is rated 1000 MW thermal and 350 MW electrical. Sodium coolant at 300C (total volume 165 m³) is heated in the reactor to 500C by about 200 fuel elements. The volume of the active zone (~2000 liters) and the power ratio (500 kW/liter) ensure a minimum use of fuel in the cycle. The ratio of the diameter of the active zone to its height (D/H) is 1.4 (D = 1.5

Card 1/12

L 20049-65

ACCESSION NR: AP4049534

m, H = 1.06 m), the maximum sodium speed is 10 m/sec, the thickness of the breeder zones on the periphery and on the end is 60 cm. The construction permits the active zone size to be varied and to use different types of fuel elements. A ceramic fuel element is used consisting of a mixture of plutonium dioxide (19% Pu) and U²³⁸. Enriched (23%) uranium dioxide can also be used. The fuel rod is a stainless steel tube 5 mm in diameter and 0.4 mm thick, filled with pellets of the sintered fuel. The arrangement of the active and breeder zones is such as to produce a conversion ratio ~1.5. The internal conversion ratio is 0.62. The change in reactivity is 0.6% per month and is compensated by motion of central fuel elements with a reactivity margin of 1.4%, permitting 2 months' continuous operation. The shielding, control, and safety precautions are described. The sodium flows through a heat exchanger in which steam is produced at 430C and 50 atm pressure. Some improvements are suggested for future designs on the basis of the experience already gained in the design of the BN-350. Orig. art. has: 1 figure.

Card 2/3

L 111164-65 EWT(m)/EPF(c)/EPF(n)-2/EPR Pr-L/PS-L/Pu-L AEDC(b)/AFWL/ESD/SSD
DM

ACCESSION NR: AP4036523

8 5/0089/64/016/005/0407/0413

AUTHOR: Bagdasarov, Yu.Ye.; Kazachkovskiy, O.D.; Pinkhasik, M.S.; Pyshin, V.K.

TITLE: Study of unsteady operating conditions for natural circulation in multi-loop designs of nuclear reactors 19

SOURCE: Atomnaya energiya, v. 16, no. 5, 1964, 407-413

TOPIC TAGS: nuclear reactor cooling, liquid metal cooling, unsteady reactor operating condition, reactor emergency shutdown

ABSTRACT: The authors have developed a method of computation of unsteady operating conditions (emergency shutdown) for natural circulation in multiloop designs of nuclear reactors. The essential point to be considered is the delay factor which depends on the heat exchange between the coolant and the stationary parts of the loop (pipes); the geometry of the heat exchanger is important. Since exact solutions are impossible because of the complexity of the problem, the authors have worked out an approximate system of equations which was programmed on an electronic computer. In the computations, the delay, coolant flow rate, heat losses through insulation, and heat exchange between the steel structure and liquid sodium were considered. Experimental results are in good agreement

Card 1/2

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ACCESSION NR: AP4036523

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with the computations. Of the factors mentioned above, the most important one is the heat exchange between the coolant (sodium) and the stationary part of the structure. The natural circulation is a reliable cooling method for nuclear reactors. Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 03Oct63

ENCL: 00

SUB CODE: NP

NO REF SOV: 003

OTHER: 000

Card 2/2

PINKHASIK, Z.

Whose interests does the public prosecutor defend? Okur. truda i sets.
strakh. no.1:95 JI '58. (MIRA 11:12)

1. Tekhnicheskiy instruktor Belorusskogo respublikanskogo soveta prof-
soyuzov, Minsk.

(Minsk--Housing)

ACCESSION : AT4040806

S/3099/62/000/001/0189/0196

AUTHOR: Askarov, M. A.; Dzumerkas, N. D.; Pinkhasov, S. R.

TITLE: A study of the copolymerization of acrylonitrile with esters of acrylic acid

SOURCE: AN UzSSR. Institut khimii polimerov. Fizika i khimiya prirodnnykh i sinteticheskikh polimerov, no. 1, 1962, 189-196

TOPIC TAGS: copolymerization, acrylic ester copolymer, acrylonitrile copolymer, polymer structure, polymer physical property, propylacrylate, butylacrylate, amylacrylate, polymer solubility

ABSTRACT: The authors first describe the synthesis of n-propyl, n-butyl and n-amyl acrylate by the simultaneous saponification and esterification of acrylonitrile in the presence of the appropriate alcohol, H_2SO_4 and hydroquinone. After purification of both the ester and the acrylonitrile, their block copolymerization was then studied at 60C. Measured amounts of the monomers were placed into ampules with a benzoyl peroxide catalyst (0.5% by weight), sealed and placed into an oven at 60C for 32 hours. The yields were 63-91% of the theoretical. A detailed investigation of the properties of the copolymers at ratios of acrylonitrile to esters of 90:10, 75:25, 50:50, 25:75, 10:90, and 0:100 showed a consistent relationship between

Card 1/2

ACCESSION NR: AT4040806

polymer structure, properties and the ratio of the monomers. Thus, no matter which ester was used, solid yellow copolymers with high values of specific viscosity and % N but limited solubility (only in dimethylformamide) were obtained at acrylonitrile: ester ratios of 90:10 and 75:25. At ratios of 50:50 and 25:75, soft yellow polymers were obtained with lower viscosity and % N but wider solubility, and at a 10:90 ratio, a transparent viscous polymer was obtained which resembled that from the pure acrylic esters (low specific viscosity and solubility in all organic solvents tested). Orig. art. has: 4 tables and 3 chemical equations.

ASSOCIATION: Institut khimii polimerov AN UzSSR (Institute of Polymer Chemistry, AN UzSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: 00

NO REF SOV: 000

OTHER: 010

Card 2/2

L 25639-65 EPF(c)/EPR/EPA(s)-2/EWP(j)/EWT(m)/T Pc-4/Pr-4/Ps-4/Pt-10
RPL RM/WW/JT
ACCESSION NR: AP5005263 S/0291/64/000/006/0045/0050

AUTHOR: Askarov, M. A.; Finkhasov, S. R. (Deceased)

TITLE: The synthesis and polymerization of some chloroacrylates

SOURCE: Uzbekskiy khimicheskiy zhurnal, no. 6, 1964, 45-50

TOPIC TAGS: plastic, acrylate, methacrylate, chloroalkyl acrylate, chloroalkyl methacrylate, polymer solubility, organic solvent, flame resistant plastic, corrosion resistant plastic

ABSTRACT: β -chloroethyl and δ -chlorobutyl acrylates and methacrylates were obtained in high yields by a direct esterification of ethylene or tetramethylene chlorohydrin with the corresponding acid in the presence of 3.5—4% H_2SO_4 added as catalyst. The obtained monomers polymerized readily under the effect of benzoyl peroxide, day- or UV-light, or heating to $60 \pm 10^\circ C$. Glassy, colorless, transparent polymers were obtained which were insoluble in the organic solvents and only swelled in polar solvents (slightly in aromatic hydrocarbons). It was found that oxygen inhibits this polymerization. The insolubility was explained by crosslinking of double bonds formed as the result of a partial splitting off of HCl. The chloro-

Card 1/2

L 25639-65

ACCESSION NR: AP5005263

acrylates or chloromethacrylates obtained are prospective polymers which can be modified by the introduction of new groups and can be used for manufacturing flame- or corrosion-resistant plastics. Orig. art. has: 3 tables and 1 formula. [BN]

ASSOCIATION: Nauchno-issledovatel'skiy institut khimii i tekhnologii khlopkovoy tsellyulozy Goskomiteta khimicheskoy promyshlennosti pri Gosplane SSSR (Scientific Research Institute of Chemistry and the Technology of Cotton Cellulose of the State Committee of the Chemical Industry of Gosplan, SSSR)

SUBMITTED: 19Dec63

ENCL: 00

SUB CODE: OC, GC

NO REF SOV: 004

OTHER: 012

ATD PRESS: 3185

Cord 2/2

TRUB, Israil' Aysikovich; MONOKROVICH, Eduard Isaakovich; MIKHAYLOVA, Ye.N.,
redaktor; PINKHASOV, Ya.B., tekhnicheskiy redaktor

[Using waste industrial heat in greenhouses and hothouses] Ispol'-
zovanie otbrosnogo tepla promyshlennosti v teplitsakh i parnikakh.
Tashkent, Gos. izd-vo Uzbekskoi SSR, 1955. 91 p. (MLRA 9:10)
(Greenhouses) (Heat engineering)

KUNYAVSKIY, M.P., kandidat ekonomicheskikh nauk, redaktor; TATUR, P.K.,
kandidat tekhnicheskikh nauk, redaktor; BONDARENKO, M.N., redaktor;
PINKHASOV, Ya.B., tekhnicheskii redaktor

[Manual for machine-tractor station engineers and organizers of land
use] Spravochnik inzhenera-zemleustroitelia MTS. Pod obshchei red.
M.P.Kuniavskogo i P.K.Tatur. Tashkent, Gos. izd-vo UzSSR, 1955. 342 p.
(MLRA 9:8)

1. Uzbek S.S.R. Ministerstvo sel'skogo khozyaystva. Upravleniye
zemleustroystva.

(Agricultural engineering)

MAKAROVICH, YA.A. ; ISKOVNIKOV, I.V. ; SLODOVA, T.L. ; INKHA, I.V.

Bacteriological and immunological data on the significance of
autoimmune mechanisms in dentistry and ulcerative colitis.
Zhur. mikrobiol., epid. i immu. 43 no. 1:11-37 Jan 1966
(yif: 1966)

1. Tadzhikskiy institut zhigovennoy meditsiny. Submitted
January 1967.

PINKHALOV I. N.

Cand. Tech. Sci.

Dissertation: "Structure of the thread : needles of knitting machines."
15 Sep 47

Moscow Textile Inst.

SO Vecheryaya Moskva
Sum 71

PINKHENSON, D. M.

PA 175T72

USSR/Oceanography - Northern Sea Jul/Aug 50
Route

"Historic Stages in the Conquering of the North-
ern Sea Route," D. M. Pinkhenson

"Iz v-s Geograf Obshch" Vol LXXXII, No 4,
pp 396-411

History of development of the northern sea
route from 15th century to now. Last figures
given are for 1936, when 14 ships navigated en-
tire route. Mentions industrial centers of
Kirovsk, Monchegorsk, Vorkuta, Amerma, Noril'sk,
Igarka, Anadyr', and Magadan. No data given on
postwar exploitation of route.

FD

175T72

PINKHENSON, Dmitriy Moiseyevich, kand. geogr. nauk, dots.; GAKKEL',
Ya.Ya., doktor geogr. nauk, prof., red.; CHERNENKO, M.B.,
red.; FRISHMAN, Z.S., red. izd-va; KOZLYAKOVA, O.I., tekhn.
red.

[History of the discovery and adoption of the Northeast Pas-
sage] Istoriia otkrytiia i osvoeniia Severnogo morskogo puti.
Leningrad, izd-vo "Morskoi transport." Vol.2. [Northeast Pas-
sage in the period of capitalism] Problema Severnogo morskogo
puti v epokhu kapitalizma. Pod red. IA.IA.Gakkelia, M.B.
Chernenko. 1962. 765 p.
(MIRA 17:3)

1. Leningrad. Arkticheskii nauchno-issledovatel'skiy institut.
2. Deystvitel'nyy chlen Geograficheskogo obshchestva SSSR (for
Chernenko)

PINKHUSOVICH, L. L.

Problems of Metallurgy. Academy of Sciences of the U.S.S.R., Moscow, 1953. Mechanical Properties of Bessemer Low-Alloy Structural Steel. N. P. Shchapov and L. L. Pinkhusovich. (409-441). (In Russian). An account is given of a comprehensive investigation of the mechanical properties of a low-alloy Bessemer steel (0.06-0.13% C, 0.28-0.64% Mn, trace-0.44% Si, 0.044-0.051% P, 0.028-0.048% S, 0.00-0.90% Cr, 0.00-0.55% Ni, 0.04-0.44% Cu, 0.013-0.018% N, 0.00008-0.00019% H, 0.00179-0.0108% O₂). The main conclusions drawn are: through alloying, the steel is actually less liable to brittle fracture than the corresponding O.H. steel and has a higher yield point; the ageing properties and sensitivity to stress-concentration in cyclic loading remain relatively poor. It is suggested that by using other measures in addition to alloying, the properties of Bessemer steel can be improved still further. Investigation of Processes Occurring during the Tempering of Hardened Steel. K. F. Starodubov. (442-450). Changes occurring in hardened steel during tempering, mainly at 300-550° C, are described and explanations are proposed. Primary Structure

of the Ingot and its Effect on the Properties of Steel. A. P. Pronov. (451-459). Unlike the finely crystalline primary structure of a carbon steel ingot, a dendritic one is characteristic of correct production conditions and results in good mechanical properties both at high and low temperatures. Factors governing the type of primary structure formed have been partially elucidated. Main Questions in the Rail Problem. L. L. Pinkhusovich. (457-461). The problem of rail quality as it has been dealt with in the U.S.S.R. is reviewed and the main factors involved are discussed.

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GRDINA, Yu. V.; BABICH, G. F.; GRUZDEV, D. S.; PINKHUSOVICH, L. I.

"Study of Kerch Arsenic Rails (Kerchenskikh mysh'yakovistyykh rel'sov)," Iz. Ak. Nauk
SSSR, Otdel. Tekh. Nauk, No.2, 1941. Submitted 30 Sep 1940.

Report U-1530, 25 Oct 1951

PINKHUSOVICH, I. I.		18	
The Quality of and Satisfactory Service Obtained from Rails of Siemens-Martin Steel from Karzh. I. I. Pinkhovich and O. N. Ushova (Bulletin de l'Academie des Sciences, U.R.S.S., (Séance des Sciences Techniques, 1948, pp. 1421-1430 (in Russian); Chemical Abstracts, 1949, vol. 43, June 10, cols. 4201-4202). The arsenic content of 0.00015% appeared to have no influence on abrasion and break tests, or on the results of experimental operation. The phenomenon of aging and slight resistance to fatigue observed in the laboratory also had no effect on the service obtained from the rails.			
U.S.S.R. (Séance des Sciences Techniques, 1948, pp. 1421-1430 (in Russian); Chemical Abstracts, 1949, vol. 43, June 10, cols. 4201-4202). The arsenic content of 0.00015% appeared to have no influence on abrasion and break tests, or on the results of experimental operation. The phenomenon of aging and slight resistance to fatigue observed in the laboratory also had no effect on the service obtained from the rails.			
ASB SLA METALLURGICAL LITERATURE CLASSIFICATION			

POPOVA, V.M., kandidat sel'skokhozyaystvennykh nauk, redaktor; BONDARENKO,
M.N., redaktor; PINKHASOV, Ya.B., tekhnicheskiy redaktor

[Principles of livestock raising] Osnovy zhivotnovodstva. Tashkent,
Gos. izd-vo Uzbekskoi SSR, 1955. 234 p. (MLRA 9:12)
(Stock and stockbreeding)

POPOV, Viktorin; LEVITINA, S.A., red.; PINKHASOV, Ya.V.

[Chardzhou-Kungrad; along the track with a notebook]
Chardzhou - Kungrad; a bloknotom po trasse. Tashkent,
Gos.izd-vo UzSSR, 1947. 29 p. (MIRA 16:8)
(Soviet Central Asia--Railroads--Location)

URETSKAYA; VISHNYAKOVA; BORISOV; PINKHASOVICH; MURADOV; REBEL'MAN; OSERSKIY;
PYATOV; BOKSERMAN; GORPISHCHENKO; YEREMENKO; ZHARKOV; POPOV; ROMANOVA;
SIDORENKO; TODRIN; TIMOVYEVA.

Dmitrii Sergeevich Pavlov; obituary. Gaz. prom. no.1:56 Ja '58.
(Pavlov, Dmitrii Sergeevich, 1904-1957) (MIRA 11:2)

PINCHENSON, D.M.; SUROVTSEV, N.S.

Deficiencies in the training of students in economic geography.
Geog. v shkole 22 no.1:42-44 Jan '59. (MIRA 12:4)
(Geography, Economic--Study and teaching)

AUTHOR: Pinkhenson, D.M.

12-1-12/26

TITLE: D.I. Mendeleyev and the Utilization of Russia's Far North
(D.I. Mendeleyev i osvoyeniye kraynego severa Rossii)

PERIODICAL: Izvestiya Vsesoyuznogo Geograficheskogo Obshchestva, 1958,
1, pp 69-75 (USSR)

ABSTRACT: The article deals with Dmitry Ivanovich Mendeleyev, a great
Russian nineteenth century scientist, who stressed the great
importance of developing the Northern and Arctic regions.
There are 11 Russian references.

AVAILABLE: Library of Congress

Card 1/1

KOVYAZIN, N.; PINKHENSEN, D.¹⁾

"Ukrainian Soviet Socialist Republic." Ol.T.Dibrova. Reviewed by
N.Koviazin, D.Pinkhenson. Geog. v shkole 19 no.4:75 J1-Ag '56.
(Ukraine--Economic conditions)(Dibrova,Ol.T.) (MLRA 9:10)

PINKHENSON, D. M.

"Role of natural resources in the development of productive capacities" by L. I. Gurvich[deceased]. Reviewed by D. M. Pinkhenson. Izv. Vses. geog. ob-va 94 no.6:532-533 M-D '62.
(MIRA 16:1)

(Economic history) (Natural resources)
(Gurvich, L. I.)

PINKHENSON, D.M., kand. geograficheskikh nauk

Makarov's project of an icebreaker for an Antarctic expedition.
Inform. biul. Sov. antark. eksp. no.36:41-44 '62.

(MIRA 16:4)

1. Gosudarstvennyy pedagogicheskiy institut imeni Lertsena.
(Ice-breaking vessels)

PINKHENSON, D.M.

Pages from the history of the White Sea - Baltic Canal. Let.
Sev. 3:207-211 '62.

(MIRA 15:8)

1. Pedagogicheskiy institut imeni A.I.Gertsena, Leningrad.
(White Sea--Baltic Canal)

PINKHENS

BARSOV, Nikolay Nikolayevich, dotsent, kand.geograf.nauk; BONIPAT'YEVA, Lidiya Ivanovna, dotsent, kand.geograf.nauk; BURMEEO, Sergey Fedorovich, dotsent, kand.geograf.nauk; GITLITS, Semen A., dotsent, kand.ekonom.nauk; GUREVICH, Priam Vladimirovich, prof.; DARINSKIY, Anatoliy Viktorovich, dotsent, kand.geograf.nauk; DOLININ, Aleksey Arkad'yevich, dotsent, kand.geograf.nauk; DOROSHKEVICH, Lyudmila Ivanovna, dotsent, kand.geograf.nauk; YEFIMOVA, Yelena Semenovna, kand.geograf.nauk; LAVROV, Sergey Borisovich, dotsent, kand.geograf.nauk; LEDOVSKIY, Stepan Ivanovich, dotsent, kand.geograf.nauk; NEVEL'SHTEYN, Grigoriy Solomonovich, dotsent, kand.geograf.nauk; NIKOLAYEVA, Nadezhda Vasil'yevna, dotsent, kand.geograf.nauk; OGARESOV, Vladimir Artem'yevich, kand.geograf.nauk; PINKHENS, Dmitriy Moiseyevich, dotsent, kand.geograf.nauk; POSPELOVA, Nataliya Georgiyevna, prof., doktor ekonom.nauk; SEMEVSKIY, Boris Nikolaevich, prof., doktor geograf.nauk; SUTYAGIN, Pavel Grigor'yevich, dotsent, kand.geograf.nauk; SHTEYN, Viktor Moritsovich, prof., doktor ekonom.nauk; YEROFEYEV, I.A., red.; SMIRNOVA, N.P., red.; TYUTYUNNIK, S.G., red.kart; BORISKINA, V.I., red.kart; KOZLOVSKAYA, M.D., tekhn.red.

[Economic geography of foreign countries; student manual] Ekonomicheskaya geografiya zarubezhnykh stran; posobie dlia studentov. Moskva, Gos.uchebno-pedagog.izd-vo M-va prosv.RSFSR, 1960. 702 p. # maps (MIRA 13:12)

(Geography, Economic)

PINKHENSAN, D.M.

Tsariets "organisers" and interests in developing the North.
Isv.Vses.geog.ob-va 88 no.4:382-384 J1-Ag '56. (MLRA 9:10)

(Russia, Northern--Geography, Economic)

GEMBEL', Aleksandr Vasil'yevich; PINKHENSON, D.M.; FODOPLELOV, N.Ya.

[Natural resources of the U.S.S.R. serve the building of communism] Prirodnye bogatstva SSSR na sluzhbu kommunisticheskogo stroitel'stva. Leningrad, Ob-vo po rasprostraneniю polit. i nauchn. znaniy RSFSR, 1959. 33 p. (MIRA 15:9)
(Natural resources)

PINKHENSON, Dmitriy Moiseyevich, doktor geogr. nauk; GORDIYENKO,
P.A., kand. geogr. nauk, nauchn. red.

[New developments on the map of the U.S.S.R.; basic changes
in the geography of the country during the Soviet period]
Novoe na karte SSSR; osnovnye izmeneniia v geografii strany
za sovetskii period. Leningrad, Ob-vo "Znanie" RSFSR, 1964.
43 p. (MIRA 18:3)

AL'TMAN, L.P.; PINKHENSON, D.M.; CHERTOV, L.G.; SEMEVSKIY, B.N., prof.,
nauchnyy red.; VOROB'YEV, G.S., red.isd-va; GURDZHIYEVA, A.M.,
tekhn.red.

[Geography of great works] Geografiia velikikh rabot. Leningrad,
Vses.ob-vo po rasprostraneniю polit. i nauchn.snanii, Leningr.
otd-nie, 1960. 39 p. (MIRA 13:7)
(Russia--Industries)

PINKHOSEVICH, Ye. G.

X-ray archives in a therapeutic institution of the dispensary type. Vest. rent. 1 rad. 40 no.2:52-54 Mr-Apr '65.

(MIRA 18:6)

1. Kafedra rentgenologii i radiologii (zav.- prof. L.D. Linderbraten) i Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova i rentgenovskoye otdeleniye (zav. V.I. Palshkova) polikliniki No.1, Moskva.

PINKHUSOVICH, I. I.

124-11-13556

Translation from: Referativnyy Zhurnal. Mekhanika, 1957, Nr. 11, p. 172 (USSR)

AUTHOR: Pinkhusovich, I. I.

TITLE: On the Notch Sensitivity of Steel Railing
(O chuvstvitel'nosti rel'sovoy stali k nadrezam)

PERIODICAL: V sb.: Prochnost' metallov., Moscow, AN SSSR, 1956, pp. 112-115

ABSTRACT: Bibliographic entry.

Card 1 1

PINKHUSHOVICH, L. L., ed.

Steel rails made from the ore of the iron mines of the Kuznetsk Alatau, 171-180 pages, 1948.

1948. 270 pages. 1957.

1957.

Dr. A. P. Pavlov,
In a Russian
Academy of Sciences, Moscow
a member of the
In content.

See: 811

NOGUCHIY, Leonid Nikolayevich; SAVITSKIY, Ye.M., otvetstvennyy redaktor;
PIMKUSOVICH, L.L., redaktor izdatel'stva; ZEMLYAKOVA, T.I.,
tekhnicheskiy redaktor.

[Working metals under pressure] Obrabotka metallov, davleniem.
Moskva, Izd-vo Akad.nauk SSSR. 1957. 198 p. (MLRA 10:4)
(Metalwork)

BARDIN, I.P.; NIKONOV, A.G.; PINKHUSOVICH, L.L.

Investigation of the hardenability of wheel steel subjected to
sliding friction. Trudy Inst.met.AN SSSR no.1:114-119 '57.
(MIRA 10:11)

(Steel--Testing) (Car wheels)

NIKONOV, A.G.; PINKHUSOVICH, L.L.

Investigating trial batches of low-alloy wheel-grade steel. Trudy
Inst. met. no.11:90-98 '62. (MIRA 16:5)
(Chromium-vanadium steel--Testing)

NIKONOV, A.G.; PINKHUSOVICH, L.L.

Wheel bandage wear. Trudy Inst. met. no.4:250-253 '60.

(MIRA 14:5)

(Car wheels--Testing)

(Mechanical wear)

PINKHUSOVICH, L.L.; NIKONOV, A.G.

Effect of hardening methods on the wear resistance and fatigue
crumbling of rail-rolled wheels. Izv. vya. ucheb. zv.; Chern.
met. no.10:126-131 '60. (MIRA 13:11)

1. Institut metallurgii im.A.A.Baykova AN SSSR.
(Steel--fatigue) (Wheels--Testing)

S. 145 8 12 1
A. 61. AC 3

AUTHORS: Pinkhusovich, L.L.; Nikonov, A.G.

TITLE: The Effect of the Quenching Method on Wear Resistance and on the Fatigue Crumbling of Rolled Seamless Wheels

PERIODICAL: Izves'iya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, 1968, No. 10, pp. 126 - 131

TEXT: Rolled RR wheels are quenched in the USSR in a horizontal position by water jets directed on the rolling surface from tangentially placed pipes. This method has been compared with the U.S. method of quenching wheels in vertical position by rotation with a wheel rim portion submerged in water (Refs. 5 - 8). The test wheels were of standard steel with 0.53% C; 0.69% Mn; 0.27% Si; 0.02% P and 0.02% S. The hardness and the mechanical properties of wheels hardened by the U.S. method were better, they had pearlitic structure through the work portion and higher wear resistance in comparative tests on a IA Amsler test machine. In fatigue crumbling tests on the same Amsler machine, specimens taken at 12 and 30 mm distance from the surface of the wheels treated the U.S. way withstood 690,000 and 875,000 cycles, compared with 630,000 and 660,000 cycles withstood by

Card 1:2

S-145760 120-10-012 1

A1617A030

The Effect of the Quenching Method on Wear Resistance and the Fatigue Crumbling of Rolled Seamless Wheels

specimens from same spots treated in the Soviet-way. The higher crumbling resistance is explained by the different metal structure having a higher resistance to cracks formation. The conclusion was made that wheels quenched in a vertical position by periodical submersion of a portion of the rim into a running water will have higher resistance to wear and fatigue crumbling. There are 5 figures, 2 tables and 4 references: 5 Soviet and 3 English.

ASSOCIATION: Institut metallurgii im. A.A. Baykova AN SSSR (Institute of Metallurgy im. A.A. Baykov of the Academy of Sciences USSR)

SUBMITTED: November 26, 1954

Card 2/2

PINKHUSOVICH, L.L.

18(0)
 Abadatsya SSSR, Institut naukovykh i tekhnicheskoy informatsii
 Metalurgiya SSSR, 1917-1917, (t. 1) II (Metalurgiya in the USSR, 1917-1917, Vol
 1) Moscow, Metallurgizdat, 1973, 813 p. Errata only inserted. 1,000
 copies printed.
 Ed. (Title page): I. P. Bardis, Academician; Ed. (Inside book): G. V. Popov.
 Yuzh. Ed.: P. G. Tolstoy.

PREFACE: This book is intended for metallurgists.

CONTENTS: The articles in this collection present historical data on the
 achievements of Soviet metallurgy from 1917 to the present. During
 the period 1917-1917, advances in metallurgy were enormous. During
 this period, many of the articles in this collection are
 of individual articles of metallurgy and give a list of present status
 reported in the USSR. Advances made in other countries may be
 discussed. The articles are accompanied by a large number of references.
 For further coverage, see Table of Contents.

Editor, I. P. Bardis, Corresponding Member, USSR Academy of Sciences, Professor,
 Institute of Metallurgy, USSR Academy of Sciences. (Institute of Metallurgy, Lenin A. A. Baykov,
 USSR Academy of Sciences. Scientific Study of the Rolling Process

This article is an extensive survey of scientific writings on the
 rolling process published in various countries including the USSR
 since 1949. The writings cover historical development, principles
 between rolls and work-piece and mechanical, deformation, high-
 speed rolling, and special methods of rolling.

Editor, I. P. Bardis, Academician and L. L. Pinkhusovich, Academician of Technical
 Sciences, (Institute of Metallurgy, Lenin A. A. Baykov, USSR Academy of
 Sciences) The Ed.: Pinkus

Historical information on the development of engineering standards for
 the engineering of rolls and on the history of roll manufacturing by
 engineering, design, and process processes is presented. Changes in
 weight and type of rolls, improvements in quality and technique
 (e.g., grinding from rolls, improvements in design and technique
 alloy steel, etc.) are presented and other related, use of
 metal and utilization of metals are mentioned.

Card 3/15

Pinkhusovich, Academician of Technical Sciences and A. A. Baykov, Academician
 of Technical Sciences, (Institute of Metallurgy, Lenin A. A. Baykov, USSR
 Academy of Sciences) Achievements in Metallurgy and Iron Production
 Changes in engineering specifications and improvements in production
 techniques and quality of steel and solid waste in the USSR since 1949
 are discussed. Further progress in this field is predicted.

REVIEW OF THE

12(0) **PAUSE 1 BOOK EXPLANATION** 809/1788

Abdumajidov met BAK. Institut metallurgii
Sovetskoye problem metallurgii (Modern Problems in Metallurgy)
Moscow, 1958, 160 p. 3,000 copies printed.
Reep. Ed. A.M. Smirnov, Corresponding Member, USSR Academy of
Sciences. Ed. of Publishing House: V.A. Kuznetsov, and
A.M. Smirnov. Tech. Ed. V.V. Polyakov.

PURPOSE: This book is intended for scientific and technical per-
sonnel in the field of metallurgy.

CONTENTS: This is a collection of articles on certain aspects of
Soviet metallurgy. The book is dedicated to Academician
Leonid Borisovich Bardin on the occasion of his 75th birthday. The
book is divided into seven parts. The first part consists of
two articles presenting a brief account of the scientific and
professional activity of the Soviet metallurgist, the author of the
article by Leonid Bardin, Academician, and Leonid Bardin (N.I.B.).
The second part consists of three articles describing their meeting with Bardin in Moscow and also his
visits to the United States. The third part consists of three
articles dealing with raw materials and fuels for the Soviet
metallurgical industry. The fourth part consists of 25 articles dealing with
the various aspects of the metallurgy of pig iron and steel.
The fifth part consists of three articles treating the metallurgy of
nonferrous metals. The sixth part consists of three
articles on the forming of metal. The seventh part consists of three
light articles discussing certain aspects of physical metal-
lurgy. The last part deals with general problems in the field
of metallurgy. References are given after each article. In
particular, the following are mentioned.

TABLE OF CONTENTS

Modern Problems in Metallurgy		809/1788
Leonid, I.I. (Doctor of Chemical Sciences, Metallurgical Institute Lenin A.A. Myrlov, AS USSR). Chemistry of Titanium		593
Starobogatov, E.P. (Academician), and Yu.2. Mikhovskiy (En- gineer, Institute of Ferrous Metallurgy, AS USSR). In- creasing the Strength and Toughness of Low Carbon Steel by Heat Treatment		598
Plakhotnich, I.I., and Z.O. Fridman. Investigating Fatigue Strength of Rails Containing Arcs		598
Plakhotnich, P.A., I.Yu. Evgenyuk, and V.A. Loshakov (Metal- lurgical Engineering Specialist). Increasing the Strength and Wear Resistance of Railroad Rails by Oil Quenching		600

GENERAL PROBLEMS IN METALLURGY

Smirnov, A.M. (Candidate of Technical Sciences, Director
of the Institute for the Design and Planning of Metallurgical
Plants). General Plans of Metallurgical Plants
AVAILABLE: Library of Congress
Card 12/73

60/66
6-15-59

AUTHORS: PINKUSOVICH, A.M.; KRYZHEVSKIY, V.I.; ZHUKOVA, L.A.
TITLE: Fatigue strength of bent metal rails containing
Arsenic (ostalostnaya pruchnost' termicheskoi obrabotannykh
rel'sov, soderzhashchikh mysh yak)
PERIODICAL: Stal', 1970, No 6, p. 560-563 (USSR)

ABSTRACT: The influence of the type of hardening process of rails containing arsenic on their fatigue strength was investigated. Experiments were carried out on rail specimens of the R-70 type, 1.1 m long containing various proportions of carbon (0.67 to 0.81%) and arsenic (0.12 to 0.23%) from four heats (table 1). During thermal treatment, specimens were changed into a cold electric furnace and heated to the hardening temperature (800 to 800°C) on average during 1 hour and then soaked at this temperature for 30 minutes. Two kinds of hardening were tested: 1) surface hardening of the head with water sprays in a machine "M-differential" and subsequently oil tempering at 350 to 400°C; 2) hardening by immersion in oil with cooling to room temperature. Fatigue tests of 1 hardened specimens was tested in a special machine, described in Ref. 1 and 2.

01.14.71-1/3

Fatigue strength of heat treated rails containing arsenic

The experimental results are given in table 1 and fig 1 to 7. It was found that the arsenic content up to 0.23% has no negative influence on the fatigue strength of rails which confirmed earlier findings (ref 1). The dependence of the fatigue strength of rails on the type of thermal treatment is shown in fig 2. The hardening in water increases the fatigue strength of rails. The results of the fatigue strength of treated rails showed a considerable spread. The sample inventories of the rails showed that the fatigue strength of rails is determined by the distribution of the width of the zone of ferrite (fig 7). It is concluded that if the conditions of thermal treatment are well chosen, the process of heat treatment can be effective means of increasing

Card 2/3

OV/133-5-4-01/5

Fatigue Strength of Heat Treated Rails Containing Arsenic
the fatigue strength of rails. There are 2 figures,
3 tables and 6 references of which 5 are Soviet and
1 English.

ASSOCIATION: Institut Metallurgii A. SSSR (the Institute of
Metallurgy of the Academy of Sciences of the USSR)

Card 3/3

SOV 137 57 11 22645

Translation from Referativnyi zhurnal Metallurgiya 1957, No. 1, p. 48, USSR

AUTHORS Bardov, I. P. Nekrasov, A. G. Pokhusovich, I. I.

TITLE The Hardenability of Wheel Steel Due to Sliding Friction
(Issledovanie zakalazhemosti koleznoy stali pri trenii
skol'zheniya)

PERIODICAL Trudy ta metallurgii AN SSSR 1957, No. 1, pp. 114-119

ABSTRACT A new method is described for testing the resistance of steel against the formation of chipped-out hollows on the rolling surface of railway wheels (W) through braking action. The reproduction of the hardened layer (H1) on the surface prior to the formation of the chipped-out hollows was accomplished under laboratory conditions on a special machine in which the specimen (S) of steel tested was fixed in a stationary position while the local heating was accomplished by the friction of a rotating W 1000 mm in diam with the rim machined in the shape of the railhead profile. The hardness on the rolling surface of the W was $H_B = 300$, i.e., equal to the hardness of the rail. The length of the S tested was equal to the width of the rim of the W, their width was 60 and thickness 40 mm. S were carefully

Card 1-3

SOV 137-87-11-1264

The Hardenability of Wheel Steel Due to Sliding Friction

ground on four sides, washed with gasoline and fitted into the grinding slot of a yoke which was made of a piece of W rim, and fastened with a wedge. The ensured heat elimination at about the same rate as in the rim of a full-scale W. Thereupon the rail-shaped W was set into rotation and, when the surface of W reached a constant linear speed (60 km/hour) the S was pressed to the W with a force regulated by the safety valve of the hydraulic transmission and kept in this position for a specified period of time. To decrease the sticking of metal onto the surface of the W during its slipping on the S it was wetted with machine oil. Upon the expiration of the time of holding the specimen under pressure, the valve on the hydraulic transmission was switched over and the S was moved away from the W. The experiments were carried out on S of carbon steel with 0.59% C holding at a constant pressure of 1250 kg during 3, 5, and 8 sec and at different loadings (750, 1000, 1250, and 1500 kg) for a constant duration of 5 sec. In addition S of 7 grades of wheel steel were tested. After the tests the structure was investigated, microhardness was measured over the section of the S, and the HL was analyzed by X-ray diffraction. The evaluation of the resistance of the W against the formation of chipped-out hollows through the braking action was made according to the hardness and the thickness of the HL. Tests were also performed on the formation of HL at low temperature (-60°C) in order to ascertain the effect.

Card 2/3

SOV 137 57 11 2243

The Hardenability of Wheel Steel Due to Sliding Friction

of the temperature of the S on the thickness and hardness of the HL and also the tendency towards the formation of cracks without the application of mechanical action. The results of the investigations are adduced and recommendations are made on the manufacture of integrally-rolled W resistant to the formation of chipped out hollows through braking action.

I G

Card 3 3

Translation from: Referativnyi zhurnal. Metallurgiya, 1981, No 1, p. 8 USSR

AUTHOR: Pinkhusovich, I. L.

TITLE: On the Notch Sensitivity of Rail Steel (O chuvstvitel'nosti rel'sovoy stali k nadrezam)

PERIODICAL: V sb.: Prochnost' metallov, Moscow, AN SSSR, 1981, pp 112-116

ABSTRACT: The rolling-load fatigue test method was employed to investigate the notch sensitivity (NS) of rails made of bessemer steel, steel containing As, and four grades of alloyed steel: Mn steel, Cr-Ti steel, Cr-V steel, and 3 percent Cr steel. The NS was evaluated from the area of "fatigue spots" at the rolling surface. It is established that rails made of bessemer carbon steel, which were not subjected to heat treatment, exhibited a considerable degree of NS. Low-alloy steel rails, which had been heat treated, exhibit a lower degree of NS than rails which had not been heat treated. The lowest NS was observed in Mn and Cr-Ti steels after heat treatment, and the highest in Cr and Cr-Ti steels which had not been heat treated. Cr-V steel exhibited a high degree of NS. Rails made of gray cast iron

Card 1/2

On the Notch Sensitivity of Rail Steel

ing As exhibit a lower NS than those made of bessemer and alloyed steel.

M. S.

1. Steel-Fatigue-Test results
2. Rails (Railway)-Mechanical properties-Test results

Card 2/2

137 1957-12 22894

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 9 (USSR)

AUTHOR: Pinkhusovich, L. L.

TITLE: On the Development of the Metallurgical Industry in Kerch (Ob
usloviyakh razvitiya kerchenskoy metallurgii)

PERIODICAL: Tr. In-ta metallurgii AN SSSR, 1957, Nr 1, pp 245-248

ABSTRACT: The accomplishment of a fuller development of ferrous metallurgy in the USSR will necessitate a wider exploitation of the ores of the Kerch deposits. An expansion of the metal production, based on the exploitation of Kerch ores is economically most profitable under a compound exploitation of the ores, which, along with steel, would also yield phosphate fertilizers and V. A number of institutes have been instructed to investigate the mineralogical composition of all varieties of the Kerch ores, to perform a detailed analysis of the geology of the area and of the chemical composition of the exploited sections, to complete the geochemical mapping of deposits which have been explored, and to work out plans for terracing and the prevention of slides. A large amount of work is planned for the processes of concentration, agglomeration, and metallurgical reduction.

A Sh.

Card 1 1

1. Metallurgy-USSR 2. Geophysical surveying 3. Ores-Determination

BLINOV, G.I.; MAKAROV, I.A.; PINKHUSOVICH, R.L.

Using radioactive control and regulation devices in hydrogenation plants. Khim. i tekhn. topl. i masel 4 no.1:15-19 Ja '59.

(MIRA 12:1)

(Radioisotopes--Industrial applications)

(Liquid level indicators)

PI IE 01, 1.

"S. Observati as on the at...
P. 504, (1954) ...

SO: ...
1954, Incl.

TUSZKIEWICZ, Maria; PINKIEWICZ, Halina; JABLONSKI, Leon

Preliminary investigations on antigen relationship of atypical
bacilli cultured from man. Ann. Univ., Lublin sect.D 16:229-237
'61.

1. Z Katedry i Zakladu Mikrobiologii Lekarskiej Wydzialu Lekarskiego
Akademii Medycznej w Lublinie Kierownik: prof. dr Jozef Parnas.
(MYCOBACTERIUM) (ANTIGENS)

SZCZYGIELSKA, Jadwiga; PINKIEWICZ, H.; BIERNACKI, Marian; PLESZCZYNSKA, Ewa

Studies on the pathogenesis of experimental influenza in white mice.
Communication II. Med.dow.mikrob. 12 no.1:15-19 '60.

1. Z Katedry Mikrobiologii Lekarskiej A.M. w Lublinie. Kierownik:
prof.dr J. Parnas.

(INFLUENZA exper.)

Handwritten: 1. Z Katedry Mikrobiologii Lekarskiej A. M. w Lublinie
SZCZYGIŃSKA, J.; PLESZCZYŃSKA, E.; BIERNACKI, M.; PARNAS, J.; PINKIEWICZ, H.

Studies on the pathogenesis of experimental influenza in white mice.
Med. dośw. mikrob. 10 no.1:15-11 1958.

1. Z Katedry Mikrobiologii Lekarskiej A. M. w Lublinie Kierownik:
prof. dr J. Parnas.

(INFLUENZA, exper.

comparative pathogen. in mice after infect. with various
strains & by various routes (Pol))

TRONSKI, Janusz; FANIA SKI, Jerzy; PIKULSKI, Iwo

Model studies on scattering losses in transformers. Elektryka
Lodz no.11:95-116 '63.

1. Katedra Maszyn Elektrycznych i Transformatorow, Politechnika,
Lodz.

FINKIN, A. M.

Remont chasov (Repairing of clocks and watches) 4. log. i ispr. izd. 10 kn., 1952.
210 p. illus., tables. "Literatura": p. (10)

SR: N/5
744.5
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1952

LINKIN, A. M.

Report on a v. Moskva, Moscow, 1961. 100. 100. 100. 100.

100. 100. 100. 100.

Report on a v. Moskva, Moscow, 1961.

100. 100. 100.

100. 100. 100. 100. 100. 100. 100. 100. 100. 100.

PINKIN, ABRAT MIKHAYLOVICH

N/5
744.5
.P6

Remont chasov (Repairing of clocks and watches) Moskva, KOIZ, 1952-

v. illus., diagrs., tables.

Includes bibliography.

Lib. has: 1952
1957

PINKINA, L. N.

"Studies of polycondensation reactions. III. On the influence of the components ration upon the growth of the polyamide chain." Rafikov, S. R., Korshak, V. V. and Pinkina, L. N. (p. 1003)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1944, Volume 14, no. 9-10.

FINKINA, L. N.

USSR/Chemistry - Acetylene, Derivatives
Chemistry - Olefins, Hydration of

Apr 1977

"Acetylene Derivatives: No 66, Mechanism of the Hydration and Cyclization of
Dienes," I. N. Nazarov, L. N. Finkina, Inst Org Chem, Acad Sci U.S.R., 54 pp

"Zhur Obshch Khim" Vol XVIII (LXXX), No 4

4-Methyl-1-vinylethynyl- Δ^1 -cyclohexene, on heating in methanol in the presence of
sulfuric acid and mercury sulfate, is hydrated to allyl-4-methyl- Δ^1 -cyclohexenylketone.
The latter compound, under the influence of phosphoric or hydrochloric acid, is readily
cyclized into 1,6-dimethyl-4,5,6,7-tetrahydroindan, which is also formed when
dienin is heated with phosphoric acid. Submitted 7 Apr 1977.

PA 8/49Th1

PINKINA, L. N.

USSR/Chemistry - Acetylene, Derivatives
Chemistry - Olefins, Hydration of

Apr 1947

"Acetylene Derivatives: No 57, Mechanism of the Hydration and Cyclization of Dienes," I. N. Nazarov, L. N. Pinkina, Inst Org Chem, Acad Sci USSR, 54 pp

"Zhur Obshch Khim" Vol XVIII (LXXX), No 4

5-Methyl-1-vinylethynyl-1-cyclohexene, on heating in methanol solution in the presence of sulfuric acid and mercury sulfate is hydrated to allyl-5-methyl-1-cyclohexenylketone, which, under the influence of phosphoric acid is cyclized to 1,5-dimethyl-4,5,6,7-tetrahydroindan-3-on. The latter can also be prepared directly by heating diene with phosphoric acid at 60 - 65°. It can be transformed into 1,5-dimethylindan by heating with phosphoric acid at 170 - 190°. Submitted 7 Apr 1947.

PA 6/49TH2

PINKINA, L. N.

"Acetylene Derivatives. 193. Mechanism of the Hydration and Cyclization of Dienines.
XVI. Hydration of 5-Isopropyl-6-methyl-1,5-pentadien-3-ine into 5-Isopropyl-6-methyl-1,5-heptadien-4-one and its Cyclization into 1-Isopropyl-2,2,3-trimethyl-4,4-cyclohexen-5-one. A New Instance of the Cyclization of Substituted Vinylallylketones which do not have a Free Hydrogen in the Vinyl Radical."
Nazarov, I. N. and Pinkina, L. N. (Inst Org Chem, Acad Sci USSR) (P. 1870)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1949, Vol. XIX, No. 10

Acetylene derivatives CXX Mechanism of hydration
and epimerization of dienes 27 Transformation of 2-
methyl-1-(vinylethynyl)cyclohexanol into 1,8-dimethyl-3-
methyl-1-(vinylethynyl)cyclohexanol A new method of synthesis of
cyclopentanone ring with
cycloalkyl ketones containing a cyclopentanone ring with
angular substituents I. N. Nazarov and L. N. Pinkhas
Zhur. Zhurnal Khim. (U.S.S.R. Chem.) 20, 2440 (1956).
Adkling with acetylene 73 2-methyl-
1-(1,4,45,2444)

[illegible][illegible]

A

Organic Chemistry - 10

Acetylene derivatives. CXX. Mechanism of hydration and cyclization of diacetynes. 27. Transformation of 1-methyl-1-(vinylethynyl)cyclohexanol into 3,3a-dimethyl 3a,4,5,6,7,7a-hexahydroindene. A new method of synthesis of polycyclic ketones containing a cyclopentanone ring with angular substituents. I. N. Nazarov and L. N. Piskina. *J. Gen. Chem. U.S.S.R.* 20, 2079-80 (1951) (Engl. transl.).—See C.A. 45, 60306. CXXI. Mechanism of hydration and cyclization of diacetynes. 28. Hydration of 2,4-

dimethyl-1-(vinylethynyl)cyclopentane and the behavior of the thus formed allyl 2,4-dimethyl-1-cyclopenten-1-yl ketone in cyclization reactions. I. N. Nazarov and M. S. Hurmistrova. *Ibid.* 2091-7.—See C.A. 45, 6037f. B. L. M.

SHKINA, L. N.

SHKINA, L. N. -- "Hydration of Vinyl-delta prime-Cyclohexenylacetylenes and the Cyclization of Allyl-delta prime-Cyclohexenylketones. A New Type of Cyclization of Substituted Vinylallylketones without a Free Hydrogen in the Vinyl Radical." Sub 30 Sep 62, Inst of Organic Chemistry, Acad Sci USSR. (Dissertation for the Degree of Candidate in Chemical Sciences).

SO: Vechernaya Moskva January-December 1962

62-58-3-4/10

AUTHORS: Knunyants, I. L. , Sterlin, R. N. , Pinkina, L. N. ,
Dyatkin, B. L.

TITLE: Reactions of Fluorolefins (Reaktsii ftorolefinov)
Communication 7. Addition Compounds of Acid Chlorides to
Vinylidene Fluoride and Trifluoroethylene (Soobshcheniye 7.
Prisoyedineniye khlorangidridov kislot k ftoristomu vinili-
denu i triftoretilenu)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh Nauk
1958, Nr 3, pp. 296 - 299 (USSR)

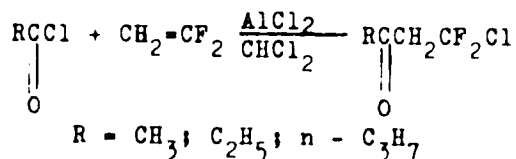
ABSTRACT: The addition of alkyl halides discovered by Kondakov was later
developed by others. In the present paper the authors show
that such fluorolefins as vinylidene fluoride and trifluor-
ethylene (in the presence of nonaqueous $AlCl_3$) possess the
capability of combining with carboxyl chlorides and thereby
forming the corresponding fluoro-substituted ketones. Vinyli-
dene fluoride very readily combines with the acid chlorides
of butyric acid and propionic acid at a temperature of
-5 to -10°C in the presence of equivalent quanta of $AlCl_3$ in

Card 1/2

62-58-3-6/30

Reactions of Fluorolefins. Communication 7. Addition Compounds of Acid Chlorides to Vinylidene Fluoride and Trifluoroethylene

pure chloroform, where alkyl-2-chloro-2,2-difluoroethylketones with yields of 44,48 and 33 % form:



At the same time substances form which correspond to the products of the partial or complete substitution of fluorine in chlorine and the products of further condensation. The authors obtained: methyl-2-chloro-2,2-difluoroethylketone and methyl-2-chloro-1,2,2-trifluoroethylketone. There are 8 references, 2 of which are Soviet.

SUBMITTED: November 3, 1956

11-11-56

Card 2/2

5(3)

AUTHORS:

Knunyants, I. L., Sterlin, R. N.,
Yatsenko, R. D., Pinkina, L. N.

SOV/62-58-11-11/26

TITLE:

Reactions of Fluoro Olefins (Reaktsii ftorolefinov)
Communication VIII. Reactions of Perfluoro Vinyl Magnesium
Halides (Soobshcheniye 8. Reaktsii
perftorvinilmagniygalogenidov)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk,
1958, Nr 11, pp 1345-1347 (USSR)

ABSTRACT:

In the present paper the authors demonstrated that by the
activation of magnesium with ethyl bromide and by carrying
out the reaction in ester at -30 to -20° a practically
quantitative consumption of magnesium can be achieved. By
the decomposition of the reaction mass with diluted sulfuric
acid 70 % of trifluoro ethylene could be separated. It was
demonstrated that under the mentioned conditions perfluoro
vinyl bromide and perfluoro vinyl chloride do not react with
magnesium and that they are unchanged after the end of the
reaction. An organomagnesium compound $CF_2=CFMgBr$ in a yield
of up to 45 % could be formed from perfluoro vinyl bromide in
tetrahydro furan. In this case it was not even necessary to

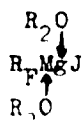
Card 1/3

Reactions of Fluoro Olefins.

SCV/60-58-11-11/26

Communication VIII. Reactions of Perfluoro Vinyl
Magnesium Halides

activate magnesium with ethyl bromide. Apparently the assertion that an intensification of the basicity of the solvent favors the formation of R_FMgJ on the basis of its stabilization in the form of a complex of the



type, is justified. As the result of the processing of $CF_2=CFMgJ$ with solid carbon dioxide in ester solution at -40° and the subsequent decomposition of the reaction mass with 2N sulfuric acid solution perfluoro acrylic acid was obtained in a yield of 40 %. Henne (Ref 6) formerly obtained this acid by a complex and very slow method. The found method can be recommended without doubt for preparation. By processing the ester solution of the perfluoro acrylic

Card 2/3

Reactions of Fluoro Olefins.

SOV/62-58-11-11/26

Communication VIII. Reactions of Perfluoro Vinyl
Magnesium Halides

acid with a calculated amount of diazomethane the methyl
ester of perfluoro acrylic acid was obtained. There are
8 references, 1 of which is Soviet.

SUBMITTED: March 4, 1957

Card 3/3

5 (3)

AUTHORS:

Sterlin, R. W., Zhunyanets, I. L.,
Pinkina, L. N., Yatsenko, R. D.

SOV/62-59-8-29/42

TITLE:

Tetra~~per~~fluorovinylsilane

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk,
1959, Nr 8, pp 1492-1493 (USSR)

ABSTRACT:

Starting from a consideration of the reaction of tetrachloro-silicon with alkyl- and aryl silanes and other organic silicon (or magnesia) halogenides, the present paper describes the attempted gradual substitution for the Cl-atom in SiCl_4 of a perfluorovinyl group. As expected, the introduction of such a group caused a decrease in the electron density in the central Si-atom. Thus the substitution of further groups is progressively facilitated. The tetrafluorovinylsilane is stable in aqueous acid solutions; in bases it is quantitatively split into trifluoroethylene which has been identified by its dibromide. The reaction is described in the experimental part. There is 1 reference.

SUBMITTED:

February 11, 1959

Card 1/1

100
1000-1000-1000

AUTHORS: Stepanov, R. N., Pizina, Yatsena, R. D., Khurman, I. L.

TITLE: ~~Perfluorovinylidene Derivatives~~
and S:

PERIODICAL: Khim. i Tekhn. ~~Perfluorovinylidene Derivatives~~
No. 11 - 1985

ABSTRACT: ~~Perfluorovinylidene Derivatives~~
The authors have synthesized a series of perfluorovinylidene derivatives of various organic compounds. The compounds obtained are characterized by high thermal stability and resistance to oxidation. The compounds are obtained from perfluorovinylmagnesium iodide and various organic compounds. Perfluorovinylidene derivatives (a new product) was obtained by decomposition of 10-perfluorovinyl-1,10-dihydrophenarsazine with liquid HCl. The obtained substances have the following properties: tri- (trifluoromethyl)-

Card 1 1

ATTORNS:

[illegible]

TITLE:

Re: The Exemption of Puerto Rico from Federal Income Tax

PERIODICAL:

Классификация: секрет (SSR)

ABSTRACT:

Radical exchange was studied in the system $\text{Pent} \cdot \text{C}_6\text{H}_5\text{I}$ - $\text{C}_6\text{H}_5\text{MgI}$ - $\text{C}_6\text{H}_5\text{MgBr}$. To study exchange, arsenic triethyl radical was used as initiator in the system. In the first run, 10% $\text{C}_6\text{H}_5\text{I}$ and 90% $\text{C}_6\text{H}_5\text{Br}$ were used. In the second run, 90% $\text{C}_6\text{H}_5\text{I}$ and 10% $\text{C}_6\text{H}_5\text{Br}$ were used. The results are shown in Table I. This shows that in the system $\text{RMgX} + \text{R}'\text{X} \rightarrow \text{R}'\text{MgX} + \text{RX}$ radical exchange takes place with a sufficient frequency to be observed. There are no significant differences between the rate constants for $\text{C}_6\text{H}_5\text{I}$ and $\text{C}_6\text{H}_5\text{Br}$.

Radical Party Per: 1980-1981

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() P. Thompson, D. A. Warner, L. J. ...
R. ...

3. SUBMITTED:

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DATA

AUTHOR:

TITLE:

PERIODICAL:

ABSTRACT:

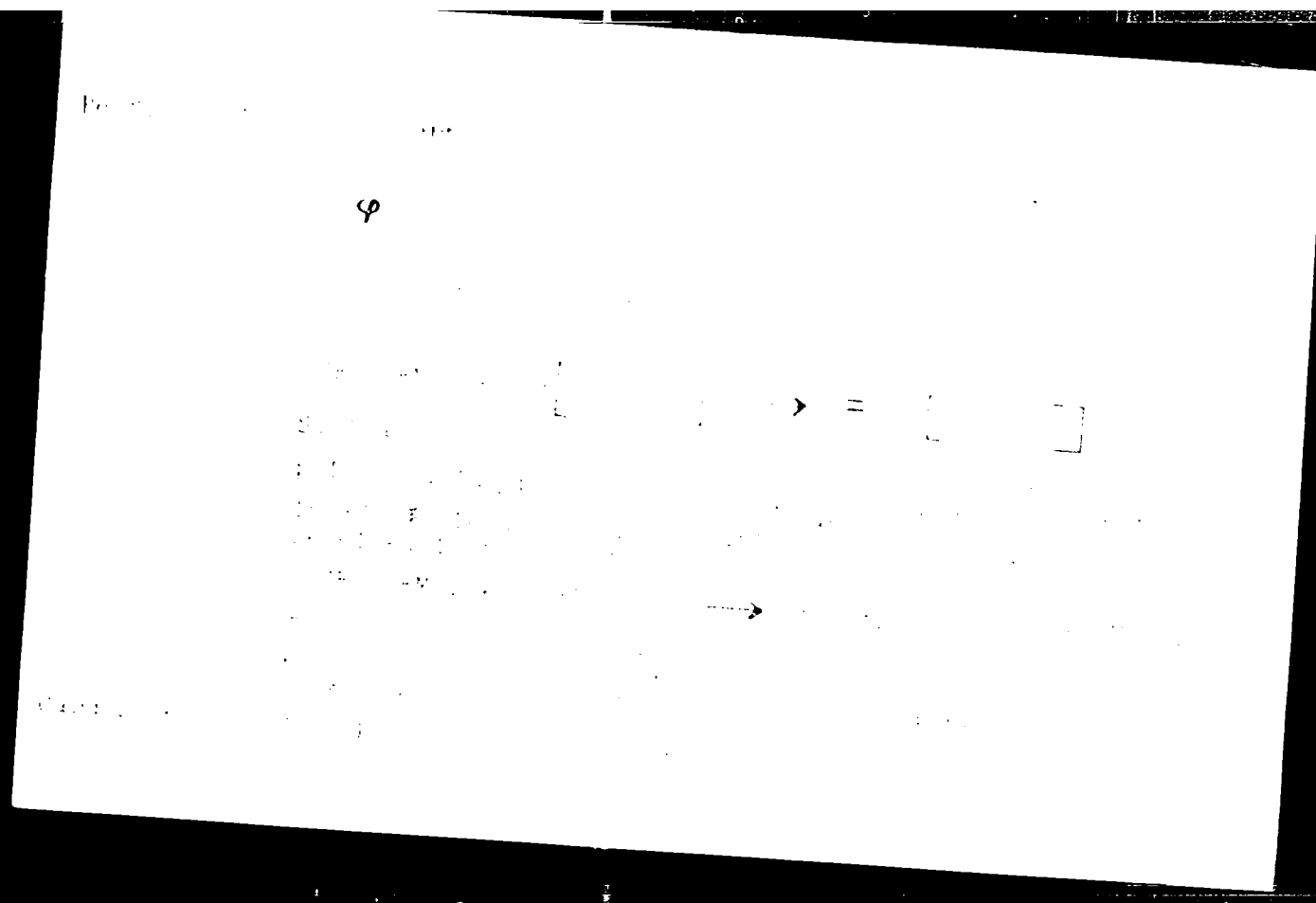
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Card 1000

1. The first part of the report

2. The second part of the report

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Card 9 4

Perfluoro Derivatives of Nonmetals

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BC13/BC78

isolated in a practically quantitative yield by the reaction of $\text{CF}_2\text{-CPAs}(\text{C}_6\text{H}_4)_2\text{NH}$ with liquid HCl . By treating the tetraethyldiamide of phosphorous acid chloride and the tetraethyldiamide of ethyl phosphinic acid with dry, gaseous HCl in xylol solution, phosphorus trichloride, and ethyldichlorophosphine, respectively, were obtained. From the reaction of perfluorovinyl magnesium iodide with the tetraethyldiamide of phosphorous acid chloride, the tetraethyldiamide of perfluorovinyl phosphinic acid was obtained. This was converted into trifluorovinyl dichlorophosphine by reaction with dry HCl in ether solution. By treating the latter with antimony trifluoride, perfluorovinyl difluorophosphine was obtained. In a similar manner, the diethylamide of di-(trifluorovinyl) phosphinic acid was obtained from $(\text{C}_2\text{H}_5)_2\text{NPCl}_2$ and perfluorovinyl magnesium iodide. By decomposing it with dry HCl , di-(trifluorovinyl)chlorophosphine was synthesized. By treating the latter with antimony trifluoride, di-(trifluorovinyl)fluorophosphine was obtained. As opposed to the trifluoromethyl derivatives of arsenic and phosphorus, the prepared tri-(trifluorovinyl) arsine and tri-(trifluorovinyl) phosphine do not

Card 2/3

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2013/2014

Perfluoro Derivatives of Nitroethane

separate trifluoroethylene when heated. Thus, the perfluorovinyl radical in the said compounds does not show any properties of pseudohalogens. Ye. P. Shcherbina and L. F. Razgovorov assisted in this work. There are 8 references: 2 Soviet.

SUBMITTED: June 4, 1959

Card 3/3

KNUNYANTS, I.L.; STERLIN, R.N.; TYULENEVA, V.V.; PINKINA, L.N.

Pseudohalide properties of perfluoroalkenyl radicals in esters of
perfluoroalkenylphosphinic acids. Izv. AN SSSR. Otd.khim.nauk
no.6:1123-1127 Je '63. (MIRA 16:7)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Phosphinic acid) (Radicals (Chemistry))

1 12718-63

ACCESSION NR: AP3002298

EPR/EFF(c)/EMP(j)/EMI(m)/BDS ASD Pa-4/Pc-4/Pr-4 RM/MAY/AM
S/0062/63/000/006/1123/1127

AUTHOR: Knunyants, I. L.; Sterlin, R. N.; Tyuleneva, V. V.; Pinkina, L. N.

TITLE: Pseudohalo properties of perfluoroalkenyl radicals in esters of perfluoroalkenylphosphoric acid

SOURCE: AN SSSR. Izv. Otdeleniya khimicheskikh nauk, no. 6, 1963, 1123-1127

TOPIC TAGS: perfluorovinyl phosphoric acid, perfluoropropenyl phosphoric acid, perfluoroisobutenyl phosphoric acid, perfluoroisobutenyl phosphoric acid, methyl perfluoropropyl phosphoric acid, hydrolysis, diisopropyl ester

ABSTRACT: The following new esters of perfluoroalkenylphosphoric acids were prepared; chemical and physical data is given: diethyl ester of 1,2-difluoro-2-chlorovinyl phosphoric acid; diisopropyl ester of perfluorovinyl phosphoric acid; diisopropyl ester of perfluoropropenyl phosphoric acid; diisopropyl ester of perfluoroisobutenyl phosphoric acid; diisobutyl ester of perfluoroisobutenyl phosphoric acid; and isopropyl ester of methyl perfluoropropenyl phosphoric acid. The perfluoropropenyl and perfluoroisobutenyl radicals at the pentavalent P show pseudohalo properties: alkaline hydrolysis of the above esters gives the corresponding fluoroalkenes, alcohols and alkali phosphate; the fluoroisobutenyl phosphoric

Card 1/2

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ACCESSION NR: AP3002298

acids did not give trifluoroethylene on hydrolysis. Orig. art. has: 3 tables, 4 formulas and 2 figures.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR
(Institute of Organoelemental Compounds, Academy of Sciences SSSR)

SUBMITTED: 15Jan63

DATE ACQ.: 16Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 004

OTHER: 001

Cord 2/2

PIN'KOVSKIY, Gleb Stanislavovich; SARSER, A.I., retsenzent;
SLAVOROSOV, A.Kh., red. izd-va; ZHIVRINA, G.V., tekhn.
red.; ROMANOVA, N.V., tekhn. red.

[Surveying operations during mine shaft sinking] Markshei-
derskie raboty pri sooruzhenii shakhtnykh stvolov. Moskva,
Izd-vo "Nedra," 1964. 150 p. (MIRA 17:3)

VAGIN, Gennadiy Ivanovich; PIN'KOVSKIY, Gleb Stanislavovich; CHERNEGOVA,
E.N., red. izd-va; SHKLYAR, S.Ya., tekhn. red.

[Using portable formwork in supporting mine shafts] Kreplenie
stvolov shakht s primeneniem peredvizhnykh opalubok. Moskva,
Gosgortekhnizdat, 1962. 146 p. (MIRA 15:11)

(Mine timbering)

(Concrete construction--Formwork)

PIN'KOVSKIY, G.S., inzh.; ABLETS, V.I., inzh.

Destructive action of corrosive waters on concrete shaft
supports in the Krivoy Rog Basin. Shakt. stroi. 6 no.7:9-10
Jl '62. (1967)

1. Trest krivbasssnakhtoprekhodka.
(Mine water)
(Krivoy Rog Bas n--Concrete construction,

PIN'KOVSKIY, G.S., inzh.

Using length-tapping devices for depth measurement in shaft
sinking. Shakht.stroi. 6 no.2:18-23 F '62. (MIRA 15:2)

1. Trest Krivbassshakhtoprokhodka.
(Shaft sinking)(Measuring tapes)

VAGIN, G.I. , inzh. ~~PIIUKOVSKIY~~, G.S.

Borehole charge firing in stages during shaft sinking. Shakh:
stroil. no.6:26-27 Ja '59. (MIRA 12:9)

1. Trost Kriyasssshakhtoprokhodka.
(Shaft sinking) (Blasting)

PIN^KOVSKIY, S.I.

Types of river channels in central and southern Siberia. Trudy GGI
no..94:87-114 '62. (MIRA 15:7)
(Siberia--Rivers)